

Title (en)
COATING METHOD FOR PRODUCING A COMBINATION OF ARMOR PLATING FOR A BLADE TIP AND EROSION RESISTANT COATING

Title (de)
ABDECKVERFAHREN ZUR HERSTELLUNG EINER KOMBINATION VON SCHAUFELSPITZENPANZERUNG UND EROSIONSSCHUTZSCHICHT

Title (fr)
PROCEDE DE RECOUVREMENT DESTINE A PRODUIRE UNE COMBINAISON DE BLINDAGE D'EXTREMITÉ D'AUBES ET COUCHE DE PROTECTION CONTRE L'EROSION

Publication
EP 3093372 A3 20170111 (DE)

Application
EP 16167274 A 20160427

Priority
DE 102015208783 A 20150512

Abstract (en)
[origin: US2016333706A1] A method for manufacturing a blade (1) for a turbomachine, the blade having a hardfacing on its tip (4) and an erosion-protection coating (13) at least on its airfoil (3) is provided. Initially, a blade tip hardfacing is applied to the blade tip and, subsequently, a mask (10) is positioned in the region of the blade tip hardfacing, the mask covering the blade tip hardfacing, and, subsequently, the erosion-protection coating is deposited. The mask is removed after the erosion-protection coating is completed. A blade for a turbomachine, the blade having a hardfacing on its tip (4) and an erosion-protection coating (13) at least on its airfoil (3) is also provided. The erosion-protection coating at least partially covers the blade tip hardfacing, and the thickness of the erosion-protection coating decreases continuously in and/or toward the region of the blade tip hardfacing.

IPC 8 full level
C23C 28/00 (2006.01); **C23C 14/04** (2006.01); **F01D 5/28** (2006.01)

CPC (source: EP US)
B23K 1/0018 (2013.01 - US); **B23K 1/19** (2013.01 - US); **C23C 14/042** (2013.01 - EP US); **C23C 14/044** (2013.01 - EP US); **C23C 14/0647** (2013.01 - US); **C23C 14/14** (2013.01 - US); **C23C 14/34** (2013.01 - US); **C23C 14/35** (2013.01 - US); **C23C 28/00** (2013.01 - US); **C23C 28/324** (2013.01 - EP US); **C23C 28/345** (2013.01 - EP US); **C25D 3/12** (2013.01 - US); **C25D 7/00** (2013.01 - EP US); **C25D 9/04** (2013.01 - US); **F01D 5/147** (2013.01 - US); **F01D 5/286** (2013.01 - EP US); **F01D 5/288** (2013.01 - EP US); **F01D 11/122** (2013.01 - EP US); **B23K 2101/34** (2018.07 - EP US); **B23K 2103/16** (2018.07 - EP US); **F05D 2220/323** (2013.01 - US); **F05D 2230/313** (2013.01 - EP US); **F05D 2240/307** (2013.01 - US); **F05D 2300/16** (2013.01 - EP US); **F05D 2300/228** (2013.01 - EP US); **F05D 2300/506** (2013.01 - US); **F05D 2300/611** (2013.01 - US)

Citation (search report)
• [XAI] EP 2317078 A2 20110504 - ALSTOM TECHNOLOGY LTD [CH]
• [A] DE 102005060712 A1 20070621 - MTU AERO ENGINES GMBH [DE]
• [A] EP 2031186 A2 20090304 - UNITED TECHNOLOGIES CORP [US]
• [A] EP 1085171 A2 20010321 - GEN ELECTRIC [US]
• [A] EP 1352988 A1 20031015 - SIEMENS AG [DE]
• [A] WO 2014126732 A1 20140821 - UNITED TECHNOLOGIES CORP [US]

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3093372 A2 20161116; **EP 3093372 A3 20170111**; **EP 3093372 B1 20200429**; DE 102015208783 A1 20161117; US 10415400 B2 20190917; US 2016333706 A1 20161117; US 2019301291 A9 20191003

DOCDB simple family (application)
EP 16167274 A 20160427; DE 102015208783 A 20150512; US 201615152671 A 20160512